

REMARKS

Claim 1 is amended, and support for the amendment is found in paragraph [0032] of the original specification.

Wulliman (US 6,627,561 B 1) does not disclose folding hose-like end sections into a Z-shape (see item (4.) of the Office Action), and claim 1 is nonobvious over the combination of Wulliman and Cota (US 6,177,157), alone or in combination with Sanocki (US 5,759,659).

No person of skill in the art would consider combining Wulliman with Cota. Wulliman is directed to a burn-through and flame propagation resistant system including a sheet of burn-through and flame propagation resistant paper, but Cota teaches a thermal sheet having first and second plates 22, 24 being made from sheets of aluminium having a thickness of 0.4 mm (see column 4, lines 4448), for example. Paper and metal plates are completely different solutions to the problem of increasing the safety of a structure to burn through and are completely different structurally.

Furthermore, Cota teaches away from the Z-fold in Figure 4, because the Z-fold fails to prevent transfer of fluids at even modest pressure differentials of only 5psi . See col. 4, line 52 to col. 5, line 4.

seam 40. By contrast, with reference to FIG. 4, seam 140 of prior art thermal shield 120 lacks structure analogous to fourth portions 60 and 72. In FIG. 4, components of seam 140 that are identical to seam 40 are identically numbered except that a 100's series prefix is added. Thus, in 30 seam 140, third portions 158 and 170 terminate significantly inward (with respect to interior chamber 126) of outer surface 156 of shoulder 154. The absence of structure analogous to fourth portions 60 and 72 significantly adversely impacts the sealing capability of prior art seal 140. Indeed, it is believed that prior art seal 140 is incapable of blocking the transfer of fluids between interior chamber 126 and the regions surrounding prior art thermal shield 120 when the pressure differential between the low pressure side of seam 40, (e.g., the side of the seam closest to interior chamber) and the high pressure side of seam 40 is in excess

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of about 5 psi. Furthermore, the absence of structure analogous to fourth portions 60 and 72 results in a seam 140 that is often unsightly and can be sufficiently sharp to create hazards in the work place and in final application.

Also neither Wulliman nor Cota propose forming a compacted end body section for a Z-fold attachment section by application of both pressure and heat, and Cota teaches away from such a structure , requiring, instead, an additional fold of the metal plates.

Surprisingly, the Z-fold attachment section of claim 1 does not suffer from the problems suggested by Cota. Indeed, by using a film envelope and using pressure and heat to form a compacted end body section, a burn-through-proof barrier layer envelopes the insulation package such that the outer film provides an obstruction to fire. Cota teaches away from the additional steps of “welding, through the use of adhesives or by other techniques,” because of the unacceptable costs of these additional steps. Instead, Cota provides a fourth portion 60 and 72, which wraps around the end of the seam 40 rather than terminating in a Z-fold, and teaches that this structure provides an effective seal without any adhesive or other “welding” of the seam 40. Thus, Cota teaches away from the structure recited in amended claim 1. For this reason, a person having ordinary skill in the art would not combine Wulliman and Cota as suggested in the Office Action.

No new matter has been added by any of the amendments. If any fee is required, please charge it to our deposit account 500864.

Entry of the amendments are respectfully requested. All of the claims are now in condition for allowance.

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Respectfully submitted,



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